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Comparing the personality profile of patients suffering from cancer disease

Seyed Mohammad Yousefi Tabaei^{a1}, Roghaye Sohrabi^b

^a*Department of medicine science, Tabriz Branch, Islamic university, Tabriz, Iran*

^b*Allameh Tabatabaiee University, Dehkade Olympic, Tehran, Iran*

Abstract

Regarding to personality profile progress, psychologists focus on the subject that behaviors, dispositions, thought style, life experiences and problem –solving methods are the unique characteristics of every one and the role of individual differences and problem-solving methods is very note worthy in this respect. Therefore, the goal of this research is the study on personality traits and its effect on correct and incorrect methods of problem –solving by people who select the inefficient methods to solve their problem, maybe guide them to psychosomatic disorders as we can refer to cancer disorders. In the current study, regarding to the personality traits of patients suffering cancer disease and the comparison between personality traits of patients suffering cancer disease and non-ill people, 200 individuals were chosen among the clients referring oncology sections and radiotherapy of Tabriz Imam Khomeini Hospital (available samples) and 200 individuals were chosen among non-ill individuals who were uniformed in respect of age, sex and social and economical status. The selection method was a descriptive and post-event method. MMPI (short form) was performed on them. The collected data resulting of questionnaire performance was analyzed by SPSS software and it was compared to in the significance level of 0.05 and 0.01 by using T-test. The results of analyzing data indicates that personality traits of patients suffering cancer disease and non-ill people was different in the significance level, lower than 0.05. In other words, cancer patients are higher than non-ill people in Pa, Hd, Sc, D, Hs factors. Pathological personality traits in individuals especially in Pa, Hd, Sc, D, Hs factors could have major role as proner and causer of cancer disease.

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1. Introduction

The cancer statement is used for more than 100 different diseases. The main symptoms of each of 100 kinds of cancer is cellular growth. Cancerous cells quickly destroy the healthy cells and tissues and attack on every member or tissue out of the primary arena of cancer in most of the cases. The studies on cancer disease specially on the ethiology of this disease has a wide spectrum. In these studies various biological, environmental and psychological factors were considered.

As other disease, the discussions on determining the importance of heredity or environment are continued about cancer disease, too. Now, it is believed that both factors in interaction with each other have a role in appearing this disease. We take into account the role of genetics almost for five percent of all cancers, other 95 percent is derived from environmental factors. However, genetics preparedness is more probably have a share in idiomatically environmental cancers. Environmental factors are efficient in appearing most of the neoplasts (tumors or recently made tissues). The researches shows that 80-90 percent of the cancer arise from life style and other environmental

Corresponding author name: ¹-Seyed Mohammad Yousefi Tabaei, tel: +989144132720

Email: aalitabaei@hotmail.com

effects (Pourshahbaz, 2010). One of the mechanisms of appearing cancer is dysfunction or disorder in immune system of the body that lymphocytes are located at the front. Lymphocytes are themselves divided into two groups of B lymphocytes and T lymphocytes. T lymphocytes have an infantry role in defensive system. Materials which control T lymphocytes are produced in certain parts of the brain and their quantity and kind of secretion are related to individual's psychological state. In depressed persons usually decreases production and secretion of these materials. The T lymphocytes don't change in short-time depression. Because their life is longer than depression period and they have received their instructions before appearing depression in the normal state. If depression prolonged or aggravated, the lymphocytes become disordered, subsequently are not able to do their tasks that are control, recognition and destruction of alien and malignant cells (Arasteh, 2009). The cancer disease is not only an attack on one's physical body but also one's psyche. The patient is greatly susceptible to the kind of cancer and surgical operation as well as in psychological basis. After a disease every patient at least suffers reactive depression or a psychological paralysis, fatigue syndrome makes him completely unwilling (Bard, 2011). Nowadays, human being who die because of the side effects of cardiovascular diseases, cancer will be the first factor of mortality in the future 10 years (Grossarth-Maticek, 2002). To consider the hypothesis of relationship between the cancer and depression, MMPI tests (Minnesota Multidimensional Personality Inventory) were given for 200 male employees. They were considered in the light of appearing cancer disease after 17 years. This study showed that in persons with high scores on depression of MMPI test, have died because of cancer more than the ones with low depression score (Augustine et al., 2008). Hyphantis et al. (2008) studied on 200 patients (75 cancerous and 125 non-cancerous) with available MMPI data before appearing their disease, this research was very well-designed. The given data on the basis of adaptable (analogous) samples were chosen. They showed that there is a significant difference on three scales of repression, depression and hysteric deny between two groups. Their findings on repression were congruent with the past studies that denoted significantly high scores in cancerous patients. Their results were on depression were unexpected but perceivable. They found that cancerous patients gained significantly lower scores than control group "until the time that depression is the representor of a threatening emotion, we could expect that participants of cancerous group agree less than participants of control group on their depression".

Methodology

The method of this research is of post-event and descriptive method.

Sampling

The first statistical population was 200 people including cancerous patients that were in the primary phases of diagnosis and therapy of their disease and were the clients of radiotherapy and oncology of Tabriz Imam Khomeini Hospital. The second statistical population included healthy people who were chosen out of the different classes of people of various places, they were 200 persons and were matched in the light of age, sex and social and economical status.

Instrument

The 71-item questionnaire of MMPI is a closed test with yes-no answers. The median of the validity of the scales of this test by half-and-half method was 70-80 percent, some of the coefficients were equal to 96 percent, but some others were less than 96%. The median of correlational coefficients of the scales by test-retest were between 50-90 percent (with an 80 percent median) and its reliability was 80%.

Results and discussion

The purpose of this research was considering the personality traits of cancerous patients and its comparison with healthy people. The results of mean differences on different scales of MMPI test in two groups (cancerous and healthy people) indicated that there is a significant difference in hypochondria, depression, hysteria, paranoia and Schizophrenia factors, but there is no significant difference in psychotism. The mean score of cancerous persons is significantly higher on hysteria, depression, Schizophrenia, hypochondria, and paranoia and higher than non-ill people. Regarding to the results, there is a significant relationship between appearing cancer and depression, Schizophrenia, hysteria, paranoia and hypochondria scales of MMPI test. To predict the findings of the study, we could deduct that a human being has physical-psychological and psychological-physical identities; immune system is a structure of psychological and biochemical system. Undoubtedly, the functions of immune system affect chemicals and emotions of the body. It is not surprising that cancer appears more in depressed people and the ones who did not feel safety feeling (Mols et al., 2010; Simonton, 1975). Also it could be predicted by what Beujamin

Volmar (1995) calls intense psychological pressure or psychosomatic disorders. In his opinion intense psychological pressure decreases the efficiency of the immune system and prevent the growth of cancerous cells, especially when one is less confident on his ability in fighting a disease and expressing his intentions. In fact the ones who have experienced stressful events of life more than usual, are susceptible to various physical and psychological difficulties whether cold or cancer (Schrab et al., 2009). The other finding showed that prevalence of the disease may be related to less knowledge of persons in the light of education. Also the mean age of the diseased people could be find in middle age, this may be denote high level of stress in this age range. On the whole, it is concluded that cancer appears by different factors, however regarding to the recent findings, psychological factors have major role in appearing this dreadful disease. To avoid this we could refer to factors like education, decreasing stress on persons through correct mechanisms of problem solving, increasing psychological health in families, professional environment, educational environment and other environments.

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